

WHAT IS CLAIMED IS:

1. A method for aerosolizing a powder, the method comprising:
providing a receptacle having a cavity containing a powder;
inserting an access end of an extraction tube into the cavity;
forming an inlet opening in the receptacle; and

flowing a pressurized gas through the inlet opening, through the cavity and through the extraction tube to move the powder in the cavity into the extraction tube where the powder is entrained in the gas to form an aerosol.
2. A method as in claim 1, further comprising producing a seal between the receptacle and the extraction tube so that substantially all of the pressurized gas exits through the extraction tube.
3. A method as in claim 2, further comprising permitting gases to enter the cavity only through the inlet opening.
4. A method as in claim 1, wherein the inlet opening forming step comprises piercing the receptacle with an access end of an inlet tube.
5. A method as in claim 4, further comprising flowing the pressurized gas through the inlet tube and into the cavity.
6. A method as in claim 1, wherein the pressurized gas is stored within a container, and further comprising releasing the pressurized gas from the container to permit the pressurized gas to flow through the inlet opening.
7. A method as in claim 6, wherein the container comprises a cylinder, and further comprising moving a piston within the cylinder to produce the pressurized gas.
8. A method as in claim 1, further comprising capturing the aerosol in a capture chamber.

9. A method as in claim 1, further comprising producing multiple inlet openings, and flowing the gas into the cavity through each inlet opening.

10. A method as in claim 1, further comprising inserting multiple outlet tubes into the cavity.

11. A method for aerosolizing a powder, the method comprising:
providing a receptacle having a top end, a bottom end, and a cavity containing a powder;

inserting a bottom end of an extraction tube into the cavity such that the bottom end of the extraction tube is spaced above the bottom end of the receptacle;

forming a hole in the bottom end of the cavity; and

flowing a pressurized gas through the hole in the bottom end of the receptacle, through the cavity and through the extraction tube to move the powder in the cavity into the extraction tube where the powder is entrained in the gas to form an aerosol.

12. A method as in claim 11, further comprising permitting gases to enter the cavity only through the inlet opening.

13. A method as in claim 11, wherein the bottom end of the receptacle includes a raised central region that extends upwardly into the cavity, and further comprising aligning the extraction tube with the raised central region such that the bottom end of the extraction tube is spaced apart from the raised central region.

14. A method as in claim 11, further comprising capturing the aerosolized powder in a capture chamber.

15. A method as in claim 11, further comprising releasing an amount of pressurized gas to produce the gas stream.

16. An apparatus for aerosolizing a powdered medicament, the apparatus comprising:

a housing that is adapted to receive a receptacle having a cavity that holds a powder;

a hole forming mechanism that is adapted to form an inlet hole in the receptacle;

at least one extraction tube that is adapted to be placed into the cavity; and

a pressure source that is adapted to provide a pressurized gas into the cavity through the inlet hole to permit the pressurized gas to flow through the cavity and through the extraction tube to move the powder in the cavity into the extraction tube where the powder is entrained in the gas to form an aerosol.

17. An apparatus as in claim 16, wherein the hole forming mechanism comprises at least one inlet tube having an access end that is adapted to pierce the receptacle, and wherein the pressure source is coupled to the inlet tube.

18. An apparatus as in claim 16, further comprising a seal that is adapted to provide a seal between the receptacle and the inlet tube and the extraction tube.

19. An apparatus as in claim 16, wherein the pressure source comprises a cylinder, and a piston that is slidable within the cylinder, and further comprising a valve that is operable to release the pressurized gas from the cylinder.

20. An apparatus as in claim 16, wherein the extraction tube has an access end that is adapted to pierce the receptacle.

21. An apparatus as in claim 16, further comprising a capture chamber coupled to the housing that is adapted to receive the aerosol, wherein the capture chamber includes a mouthpiece to permit the aerosol to be inhaled.

22. An apparatus as in claim 21, wherein the capture chamber includes a vent to permit gases to enter into the capture chamber as the aerosol is inhaled.

23. An apparatus for aerosolizing a powdered medicament, the apparatus comprising:

a housing having a holder that is adapted to receive a receptacle having a cavity that holds a powder;

a piercing mechanism that is adapted to pierce a hole in a bottom end of the receptacle;

an extraction tube that is adapted to be placed into the cavity so as to be spaced above the bottom end of the receptacle and to be aligned with the hole in the bottom end.

24. An apparatus as in claim 23, further comprising a pressure source that is adapted to produce a pressurized gas that is flowed through the hole in the bottom end of the receptacle, through the cavity and into the extraction tube to move the powder from the cavity and into the extraction tube where the powder is entrained in the gas to form an aerosol.

25. An apparatus as in claim 23, further comprising a mouthpiece coupled to the housing that is adapted to receive a patient's mouth.

26. A system for aerosolizing a powdered medicament, the system comprising:

a receptacle having a sealed cavity that holds a powder;

a housing that is adapted to receive the receptacle;

a hole forming mechanism that is adapted to form an inlet hole in the receptacle;

at least one extraction tube that is adapted to be placed into the cavity; and

a pressure source that is adapted to provide a pressurized gas into the cavity through the inlet hole to permit the pressurized gas to flow through the cavity and through the extraction tube to move the powder in the cavity into the extraction tube where the powder is entrained in the gas to form an aerosol.

27. A system as in claim 26, further comprising a seal member that forms a seal between the extraction tube and the receptacle such that the pressurized gas may enter only through the inlet and exit only through the extraction tube.

28. A system as in claim 26, wherein the extraction tube has a tapered distal end and a side hole spaced above the distal end to permit gas flow into the extraction tube through the side hole in the event that the distal end is blocked by a flap extending from the receptacle.